To: Senate   From: Registrar

                                      27 October, 1967

Subject: Graduate Calendar Changes,
           Dept. of Economics and Commerce.

        The following material is presented to the November
meeting of Senate rather than the December (Calendar)
meeting because the Department states the changes proposed
will affect students currently enrolled.

        The graduate course Economics 830-5 was presented to
Senate in September but was referred back to the Department
for rewording to clarify its relationship to undergraduate
Mathematics courses.

                          D. P. Robertson
                          Registrar

DPR/md

Economics 830-5

Analytical Economics

This course is concerned with mathematical
formulation of economic concepts which have found
widespread application in economic theory and research
in recent years. It will include elements of demand
and production theory, theory of the firm, and theory
of consumer choice involving calculus techniques.
Also included are input-output and linear programming
formulations of transportation and production models
which employ matrix and linear algebra techniques,
and economic growth and cycle models involving the
use of difference equations.

Highlights of changes proposed in graduate program by
Department of Economics and Commerce

1.   The M.A. Program:

   a.   The required courses are Economics 830-5, 805-5 and
        835-5, rather than 800-5 and 805-5 as previously.

   b.   The number of extended essays is reduced from 4 to
        not less than 2.

   c.   The portion of the required course work which may be
        completed in another discipline or at another institution
        will be determined by the Department for each
        graduate student.   The former 5 credit limits will
        no longer apply.

2.   The Ph.D. Program:

   a.   Economics 830-5 is an added course requirement for
        students who have not had an equivalent course.

   b.   The portion of the required course work which may be
        completed at another institution or in another discipline
        will not be limited to 5 credits.   As with M.A. students,
        the limits will be determined for each graduate student
        by the Department.

SIMON FRASER UNIVERSITY

DEPARTMENT OF ECONOMICS AND COMMERCE

GRADUATE STUDIES IN ECONOMICS

The Department of Economics and Commerce offers graduate work leading to the degree of Master of Arts (M.A.) and Doctor of Philosophy (Ph.D.).

Applications for admission to graduate studies in economics are considered by the University's Senate Graduate Admissions Committee only on the recommendation of the Department of Economics and Commerce.

The Department's facilities for advanced study and research at present are best developed in the areas of labor economics (especially manpower aspects), international economics and economic development (including its regional and resource aspects). The Department further offers an extensive program in economic theory and quantitative methods, both as supporting areas for work in the aforementioned areas and as areas of direct specialization.

The graduate economics program at S. F. U. reflects recognition of the increased application of mathematical concepts and quantitative techniques to economics. Accordingly, the program includes a special set of courses designed to ensure that, as a minimum, all graduate students acquire the reading knowledge of basic mathematical economics and econometrics which will enable them to keep abreast of current developments in the discipline. In addition, students with little previous training in economics but with a strong background in mathematics who wish to take graduate studies in economics are encouraged to apply. Special guidance will be given to such students to remedy deficiencies in their economics background.

As a matter of policy, the Department allows students to register in the graduate program on a part-time basis at the M. A. level. This is designed, particularly, to accommodate persons living in the Vancouver area, whose family or business responsibilities require them to continue employment while they study. Such students will be required to complete the full program of formal work for the degree concerned, but may spread the work over a period that is longer than normal.

The M.A. Program

To gain the Department's recommendation for admission, a student applicant must present evidence that he is adequately prepared in terms of the extent of his undergraduate training and the level of his scholarly ability.

Normally, the Department will recommend for admission only students who have achieved at least a "good" second class standing in their undergraduate work (i.e. a full "B", "B+", or "A", but not a "B-"). Students from United Kingdom universities, generally, will be accepted only if they have achieved a "first", or "upper second". In exceptional cases the Department may recommend for admission students who are able to present alternative evidence of their academic ability.

The M.A. program normally will include the following:

1. **Successful completion of at least 30 approved semester hour credits beyond the level of a bachelor's degree with honors in economics.**

   This work will usually consist either of six graduate courses (30 credits) or of four graduate courses (20 credits) and a thesis (10 credits). Students must satisfy the Department that they have achieved a satisfactory level of competence in analytical economics, macroeconomic theory and quantitative methods. Except where students have successfully undertaken equivalent work in their undergraduate program or in graduate work at another university, this requirement will be met by completing the graduate courses 830-5, 805-5, and 835-5, respectively.

2. **Successful completion of a thesis or not less than two extended essays.**

   Students must give evidence of their research and writing ability by the satisfactory completion either of a thesis (counting for 10 credits) or of not less than two extended essays (no credits).

   Extended essays normally will be graduate course term papers extended in a quality dimension - not in a quantity dimension. The Candidate's Supervisory Committee will indicate the quality dimension in which the paper should be extended. A first class term paper may not require any revision or extension. Once both extended essays have been accepted by the Supervisory Committee, they will be submitted to the judgment of an Examining Committee of at least three members, one of whom will not be a member of the Department.

The Ph.D. Program

Recommendation for admission will be made only when the Department has received evidence that a candidate is able both to complete formal course work at the most advanced level and to produce a satisfactory dissertation.

The Ph.D. program normally will include the following:

1. Successful performance in approved courses amounting to a total of 60 semester hour credits beyond the level of a bachelor's degree with honors in economics. A student who has the M. A. degree in economics from Simon Fraser University (or equivalent qualification) will be required to take 30 semester hours of approved course work in his Ph.D. program.

   Unless they have satisfactorily undertaken equivalent course work previously, students must include in their program of work: Analytical Economics (830-5), Microeconomic Theory (800-5), Macroeconomic Theory (805-5) and Quantitative Methods (835-5)

2. Written qualifying examinations in basic economic theory and three other fields selected from the following: advanced theory, monetary economics, quantitative methods, mathematical economics, international economics, public finance, economic history, development economics, regional and urban economics, resource economics, economic systems and labor economics.

   The field in which a student is writing his dissertation will be one of those in which he is examined. With the approval of the Department, a student may substitute for one of the fields listed above, a field from a related discipline that is relevant to the economics research interest of the student.

   A candidate must have completed the required course work before he may write the qualifying examinations, which must then be completed within nine months.

3. Qualification in a supporting subject. A student must qualify in a supporting subject in addition to the 60 credit requirement under 1. above. A student may select as a supporting subject a language other than English. To qualify, a student must demonstrate a thorough reading knowledge in the language concerned, as well as familiarity with the economics literature in that language.

   A student may select mathematics as a supporting subject. To qualify he must demonstrate competence in aspects of mathematics (including differential and integral calculus and linear algebra) adequate to support advanced course work in quantitative methods.

sertation in whole or in part. In the latter case, the dissertation may be resubmitted after necessary changes have been made. The approval of the Examination Committee is required before a dissertation will be accepted for the Ph.D. degree. A candidate may not submit his dissertation until he has successfully completed his qualifying examinations and has qualified in his supporting subject.

GRADUATE COURSES IN ECONOMICS

800-5   Microeconomic Theory

801-5   Advanced Topics in Microeconomic Theory

802-5   Consumer Economics

803-5   Welfare Economics

804-5   Theory of the Firm

805-5   Macroeconomic Theory

806-5   Advanced Topics in Macroeconomic Theory

808-5   History of Economic Thought up to 1870

809-5   History of Economic Thought from 1870

810-5   Monetary Theory

812-5   Stabilization Policy

814-5   Financial Institutions

830-5   Analytical Economics

831-5   Mathematical Economics

832-5   Activity Analysis

835-5   Quantitative Methods

837-5   Econometric Theory

838-5   Topics in Econometrics

840-5   Theory of International Trade

842-5   International Monetary Economics

861-5   Resource Development and Conservation

862-5   Forestry Economics

863-5   Fisheries Economics

864-5   Agriculture in Economic Development

865-5   Regional Economic Theory

867-5   Regional Development Problems

869-5   Transportation Economics

881-5   Labor Economics

886-5   Industrial Relations

890-5   Public Finance

893-5   Antitrust Policy

895-5   Comparative Economic Systems

899-5   Readings in Economics